



# **WATKINS GLEN SOLAR ENERGY CENTER**

**Case No. 17-F-0595**

**1001.2 Exhibit 2**

**Overview and Public Involvement**

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## Exhibit 2: Overview and Public Involvement

This Exhibit will track the requirements of Stipulation 2, dated February 21, 2020, and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.2.

### 2(a) Brief Description of the Proposed Project

The Watkins Glen Solar Energy Center (the Project) is a proposed solar energy project that will have a generating capacity of 50 megawatts (MW) and will be located on land leased from Watkins Glen International adjacent to the Watkins Glen International Raceway in the Town of Dix, Schuyler County, New York. Once completed, Watkins Glen International Raceway will house what is anticipated to be the largest solar field to be located at a racetrack in the United States. Proposed Project Components include commercial-scale solar arrays, access roads, inverters, fencing, buried electric collection lines, and electrical interconnection facilities. The Project Area totals approximately 771 acres. The Project Limit of Disturbance (LOD) is approximately 392 acres, and the total fenced area for the Project is approximately 352 acres.

The Applicant intends to construct, own, operate, and maintain all components of the Project. In 2018, the Applicant signed a long-term agreement to sell the Renewable Energy Credits (REC) generated by the Project to the New York State Energy Research and Development Authority (NYSERDA). This Exhibit includes specifications for a typical solar module that may be utilized for the Project along with the locations of the solar arrays and related infrastructure including the proposed collection substation and interconnection facilities within the Project Area, in relative proximity to New York State Electric and Gas' (NYSEG) existing Bath-Montour Falls 115-kilovolt (kV) transmission line (see Figure 2-1). The proposed interconnection facilities will include a 115-kV switchyard and 115-kV tap line approximately 75-100 feet in length, which will be transferred to NYSEG to own and operate.

**Solar Arrays:** The Applicant intends to utilize a solar module similar to the Jinko Solar Eagle 72HM G2 380-400-Watt Mono Perc Diamond Cell. The Project will utilize a solar tracking array racking system such as the Gamechange Solar Genius Tracker™ System. Technical data sheets for this module and racking system have been included in Appendices 2-1 and 2-2, respectively.

**Inverters:** Inverters will be located throughout the solar arrays to convert the direct current (DC) electricity generated by the solar modules into alternating current (AC) electricity. Cables from the solar modules are routed to the inverters using a CAB® cabling system or underground lines. The

collection lines then convey electricity from the inverters underground to the Project collection substation and ultimately to the existing electric transmission system. The Applicant intends to use ABB Compact Skid PVS980-CS-US for 2 to 4.4-MVA inverters, or a similar make/model. Refer to Appendix 2-3 for the technical data sheet.

**Access Roads:** Roads within the Project Area to be used for access to the solar arrays will follow existing farm roads and trails, where practicable, to minimize the need for new roads. The access roads used during construction will be utilized for Project operations. The roads will be approximately 12 feet (3.66 meters) wide and will be constructed of gravel per the engineering specifications included on the site plan drawings included in Exhibit 11 – Preliminary Design Drawings. Access roads to the substation and switchyard will be approximately 20 feet (6.10 meters) wide. The total length of permanent access roads proposed for the Project is approximately 3.21 miles.

**Collection Lines:** The 34.5-kV collection lines will connect the inverters with the Project collection substation. The total length of collection line being included as part of the Application for the Project is approximately 4.74 miles (7,628.3 meters). Collection lines will be installed underground (approximately 4.62 miles [7,435.17 meters]) via direct burial and horizontal directional drilling (HDD) (approximately 0.12 miles [193.12 meters]).

**Fencing:** Fencing will be placed around the perimeter of the arrays and associated structures as detailed in Appendix 11-1. The fencing will be 7-foot-tall chain-link fencing in accordance with local regulations. Only the fencing around the collection substation and switchyard will be topped with barbed wire for safety and security reasons.

**Project Collection Substation:** The 34.5-kV collection lines within the Project Area will collect electricity from the inverters and transport it to a new collection substation. The collection substation, located on the southeastern portion of the Project Area (see Appendix 11-1), will step up the voltage to 115 kV. The collection substation is anticipated to occupy approximately 1.18 acres (4,775.3 square meters) of non-agricultural, successional old-field land. This acreage is for the substation only, not including the switchyard, which is an adjacent but separate area.

**Point of Interconnection (POI) Facilities:** Power from the collection substation will be transferred to the adjacent switchyard and then interconnected to the existing NYSEG Bath-Montour Falls transmission line by a proposed approximately 75–100-foot-long 115-kV tap line. The switchyard and tap line will be transferred to NYSEG to own and operate.

## 2(b) Brief Summary of the Application Contents

The Article 10 Application includes a total of 41 exhibits, 9 of which were deemed not applicable to the Project. Supporting information for each exhibit is provided in the Table 2-1 below. For the purpose of this Application, the following definitions describe various areas, boundaries, or Components of the Project:

- **Applicant:** Watkins Glen Solar Energy Center, LLC, a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC (NextEra).
- **Project:** The proposed Watkins Glen Solar Energy Center solar facility.
- **Project Area:** The 771 acre area encompassing all Project parcels located within the Town of Dix, as shown on Figure 2-1.
- **Study Area:** Typically, the 15,650-acre area within a 2-mile buffer of the currently proposed Project boundary. A majority of the resource area impact studies conducted for this Application were completed within this area. Some studies utilized resource-specific study areas, the extents of which are defined in the applicable exhibit.
- **Component or Facility:** An individual piece, or collection of equipment or improvement of the Project, including solar arrays, inverters, access roads, buried electric collection lines, electrical interconnection facilities, laydown areas, and fencing.

**Table 2-1. List of Exhibits and Supporting Documentation**

<b>Exhibit</b>	<b>Exhibit Title/General Description</b>	<b>Supporting Documentation</b>
<b>1</b>	<b>General Requirements</b>	<ul style="list-style-type: none"> <li>▪ Certificate of Formation</li> </ul>
<b>2</b>	<b>Overview and Public Involvement:</b> Brief overview of the Project, public communications, and rationale for why the Project should be granted a certificate.	<ul style="list-style-type: none"> <li>▪ Jinko Eagle 72HM G2 380-400-Watt Mono Perc Half Cell Module Technical Data Sheet</li> <li>▪ Gamechange Solar Genius Tracker™ Data Sheet</li> <li>▪ ABB Compact Skid PVS980-CS-US – 2 to 4.4-MVA Technical Data Sheet</li> <li>▪ PIP Meeting Log</li> <li>▪ Stakeholder List</li> </ul>
<b>3</b>	<b>Location of Facilities:</b> Maps and information on the location of the proposed Project.	<ul style="list-style-type: none"> <li>▪ Proposed Project Component Locations</li> </ul>
<b>4</b>	<b>Land Use:</b> Description of existing and proposed land use based on local, state, and federal classifications. Includes anticipated facility impacts and conformance with publicly known land uses and use regulations.	<ul style="list-style-type: none"> <li>▪ Tax Parcels</li> <li>▪ Town of Dix Zoning Map</li> <li>▪ Existing and Proposed Land Use Maps</li> <li>▪ Specially Designated Areas Map</li> <li>▪ Recreational and Other Sensitive Land Uses</li> <li>▪ Existing Utility Locations</li> <li>▪ Aerial Photograph Overlays</li> <li>▪ Farmland Classification Maps</li> </ul>
<b>5</b>	<b>Electric Systems Effects:</b> Description of facility transmission impacts of operation and maintenance. Includes applicable codes, standards, and protocols for generation and ancillary features design, construction, commissioning, and operation.	<ul style="list-style-type: none"> <li>▪ System Reliability Impact Study (SRIS)</li> <li>▪ Collection Substation Design Criteria</li> <li>▪ Operations and Maintenance Plan</li> </ul>
<b>6</b>	<b>Wind Power Facilities</b>	Not Applicable
<b>7</b>	<b>Natural Gas Power Facilities</b>	Not Applicable
<b>8</b>	<b>Electric System Production Modeling:</b> Input data utilized to calculate facility emissions and generating capacity. Input data determinations confirmed through New York State Department of Public Service (NYSDPS) coordination.	<ul style="list-style-type: none"> <li>▪ Production Modeling Analyses</li> </ul>
<b>9</b>	<b>Alternatives:</b> Analysis of applicable alternative facility and component locations and suitability of existing environmental setting.	None
<b>10</b>	<b>Consistency with Energy Planning Objectives</b>	None

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<b>Exhibit</b>	<b>Exhibit Title/General Description</b>	<b>Supporting Documentation</b>
<b>11</b>	<b>Preliminary Design Drawings:</b> Facility Component drawings prepared by a professional engineer or architect licensed and registered in New York State (NYS). Comparison of preliminary design drawings to applicable engineering codes, standards, and guidelines.	<ul style="list-style-type: none"> <li>▪ Preliminary Design Drawings</li> <li>▪ Landscaping Plan</li> <li>▪ Lighting Plan</li> </ul>
<b>12</b>	<b>Construction:</b> Facility installation and monitoring procedures in conformance with applicable design, engineering, and installation standards and criteria.	<ul style="list-style-type: none"> <li>▪ NextEra Energy Major Duties &amp; Accountability Matrix</li> <li>▪ Complaint Resolution Plan</li> <li>▪ Quality Assurance and Quality Control Plan</li> <li>▪ Empire Pipeline Encroachment Manual</li> <li>▪ Columbia Pipeline TransCanada General Guidelines</li> </ul>
<b>13</b>	<b>Real Property:</b> Project Area property rights accessed via lease or easement agreements and description of tax property information.	<ul style="list-style-type: none"> <li>▪ Survey of Property Leased by Applicant</li> <li>▪ Demonstration that the Applicant has Obtained Rights in the Project Area</li> </ul>
<b>14</b>	<b>Cost of Facilities:</b> Description of the Project's capital costs.	<ul style="list-style-type: none"> <li>▪ Estimated Cost of Facilities</li> </ul>
<b>15</b>	<b>Public Health and Safety:</b> Discussion of potential adverse impacts posed by construction or operation of the facility.	<ul style="list-style-type: none"> <li>▪ Noise Analysis</li> <li>▪ Study Area Maps</li> </ul>
<b>16</b>	<b>Pollution Control Facilities</b>	Not Applicable
<b>17</b>	<b>Air Emissions:</b> Evaluation of the Project's pollution control technologies and plans to handle, store, and dispose waste byproducts.	None
<b>18</b>	<b>Safety and Security:</b> Measures to ensure safe practices during construction and operation of the Project, including complaint resolution procedures.	<ul style="list-style-type: none"> <li>▪ Site Security Plan</li> <li>▪ Preliminary Emergency Response Plan (ERP)</li> </ul>
<b>19</b>	<b>Noise and Vibration:</b> Comprehensive analysis of Project acoustic effects.	<ul style="list-style-type: none"> <li>▪ Noise Impact Study</li> <li>▪ Noise Level Estimates</li> </ul>
<b>20</b>	<b>Cultural Resources:</b> Research to determine if any cultural resources are impacted by the Project.	<ul style="list-style-type: none"> <li>▪ Phase I Archaeological Resources Study</li> <li>▪ Historic Architectural Survey and Effects Report</li> <li>▪ Cultural Resources-Related Correspondence</li> </ul>



**Table 2-1. List of Exhibits and Supporting Documentation**

<b>Exhibit</b>	<b>Exhibit Title/General Description</b>	<b>Supporting Documentation</b>
<b>21</b>	<b><i>Geology, Seismology, and Soils:</i></b> Analysis of the geology and soils in the Project Area to ensure area can support solar arrays and to address potential impacts.	<ul style="list-style-type: none"> <li>▪ Existing Slopes Map</li> <li>▪ Soil Types Map</li> <li>▪ Depth to Bedrock Map</li> <li>▪ Mines and Quarries Map</li> <li>▪ Oil and Gas Wells Map</li> <li>▪ Geotechnical Engineering Report</li> <li>▪ Preliminary Blasting Plan</li> </ul>
<b>22</b>	<b><i>Terrestrial Ecology and Wetlands:</i></b> Comprehensive study of plant and wildlife in the Project Area, potential impacts from the Project, and mitigation measures.	<ul style="list-style-type: none"> <li>▪ Plant and Wildlife Inventory List</li> <li>▪ Breeding Bird Survey Report</li> <li>▪ Winter Raptor Survey Report</li> <li>▪ Cumulative Breeding Bird Survey Analysis</li> <li>▪ Maps and Shapefiles depicting wetlands and streams</li> <li>▪ Wetland and Stream Delineation Report</li> <li>▪ Wetland Functions and Values Assessment</li> <li>▪ Invasive Species Management and Control Plan (ISMCP)</li> </ul>
<b>23</b>	<b><i>Water Resources and Aquatic Ecology:</i></b> Review of Project impacts to water resources in the area and plans to mitigate impacts.	<ul style="list-style-type: none"> <li>▪ Freedom of Information Law (FOIL) Requests and Correspondence</li> <li>▪ Private Water Well Survey and Responses</li> <li>▪ Shapefiles of Surface Water Data</li> <li>▪ Preliminary Stormwater Pollution Prevention Plan (SWPPP)</li> </ul>
<b>24</b>	<b><i>Visual Impacts:</i></b> Visual impact assessment of the Project, including photo simulations.	<ul style="list-style-type: none"> <li>▪ Visual Impact Assessment (VIA)</li> <li>▪ Glare Analysis</li> <li>▪ Viewshed Analysis and Viewshed Map</li> <li>▪ Photographic Simulations</li> </ul>
<b>25</b>	<b><i>Effect on Transportation:</i></b> Impact of the Project on transportation including during construction and operation.	<ul style="list-style-type: none"> <li>▪ Accident Data &amp; Applicable Transportation Analyses</li> <li>▪ Construction Worker Routing Map</li> <li>▪ Sight Distance Diagrams</li> <li>▪ New York State Department of Transportation (NYSDOT) Average Annual Daily Traffic (AADT) Volumes</li> <li>▪ Accident Summary Data</li> <li>▪ Highway Capacity Software (HCS) Level of Service Output</li> </ul>
<b>26</b>	<b><i>Effect on Communications:</i></b> Analysis of Project impact on all types of communications in the Project Area.	None
<b>27</b>	<b><i>Socioeconomic Effects:</i></b> Analysis of the Project and its impact to the economy and jobs.	<ul style="list-style-type: none"> <li>▪ National Renewables Energy Laboratory Jobs and Economic Development Impact (JEDI) Model</li> </ul>
<b>28</b>	<b><i>Environmental Justice:</i></b> Air quality and health impacts on certain communities.	<ul style="list-style-type: none"> <li>▪ Environmental Justice Area Map</li> </ul>

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<b>Exhibit</b>	<b>Exhibit Title/General Description</b>	<b>Supporting Documentation</b>
<b>29</b>	<b>Site Restoration and Decommissioning:</b> Plans for site restoration upon Project decommissioning.	▪ Decommissioning and Restoration Plan
<b>30</b>	<b>Nuclear Facilities</b>	Not Applicable
<b>31</b>	<b>Local Laws and Ordinances:</b> Local laws pertinent to the Project.	▪ Town of Dix Zoning Ordinance (February 2016) ▪ Town of Dix Solar Energy Law (Local Law No. 2 of Year 2018)
<b>32</b>	<b>State Laws and Regulations:</b> State laws pertinent to the Project.	None
<b>33</b>	<b>Other Applications and Filings:</b> Other state and federal applications and filings that are relevant to the Project.	None
<b>34</b>	<b>Electric Interconnection:</b> Description of Project electric systems	None
<b>35</b>	<b>Electric and Magnetic Fields (EMF):</b> EMF analysis for certain Project and Project-related electric systems.	▪ EMF Study
<b>36</b>	<b>Gas Interconnection</b>	Not Applicable
<b>37</b>	<b>Back-Up Fuel</b>	Not Applicable
<b>38</b>	<b>Water Interconnection</b>	Not Applicable
<b>39</b>	<b>Wastewater Interconnection</b>	Not Applicable
<b>40</b>	<b>Telecommunications Interconnection:</b> Description of communications network required for the Project.	None
<b>41</b>	<b>Applications to Modify or Build Adjacent</b>	Not Applicable

**2(c) Brief Description of the Public Involvement Program prior to Submission of the Application**

The draft Public Involvement Program (PIP) Plan was submitted to the New York State Department of Public Service (NYSDPS) on September 25, 2017. The PIP Plan was updated and finalized following the receipt of comments from the NYSDPS and filed on November 24, 2017.

**(1) PIP Components To Date**

In order to encourage public involvement in the Project throughout the Article 10 process, information such as fact sheets, town board meeting and open house presentations, and educational materials were made available on the Project website (<https://www.watkinsglensolarenergycenter.com/>) beginning on January 17, 2018. Information

related to language access, identification of environmental justice areas, and the use of document repositories are outlined in the PIP Plan. The PIP Plan is available on the Project website and on the NYSDPS Document and Matter Management (DMM) website (<http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=17-F-0595&submit=Search>).

The Applicant has completed the pre-Application consultations set forth in the PIP Plan and has held multiple stakeholder meetings. The Applicant has encouraged local involvement through open dialog discussions and appearances at numerous meetings with various groups and individuals including the Town of Dix Town Board and Highway Department, the Schuyler County Partnership for Economic Development, adjacent landowners, and others as detailed in the PIP Meeting Log (see Appendix 2-4). The PIP Meeting Log also details public and agency correspondence or outreach conducted through the Project website and by phone. Documented correspondence with the Applicant, as well as relevant questions and concerns related to the Project, are captured in the Meeting Log. The PIP Plan activities are ongoing and include regular communications about the Project and Article 10 Application process through the stakeholder contact list, and the Project website.

### ***(2) Public Involvement Activities***

Notice of the Application submittal was served in accordance with 16 NYCRR § 1000.7 and to a Project mailing list consisting of the updated stakeholders list, including host and adjacent landowners, and additional addresses received through public outreach. The notice included general Project information and details regarding the Article 10 Application.

### ***(3) Newspaper Publications***

In addition to mailing notices as required under 16 NYCRR § 1000.7, notices were published regarding the Application in two newspapers local to the Project and Study Areas, Watkins Glen Review & Express, and the Schuyler County Hi-Lites as required under 16 NYCRR § 1000.7(a).

### ***(4) Open House Information***

Details regarding the two open houses held on July 23, 2019 are as follows:

- The open houses were conducted from 11 am to 1 pm and 5 pm to 7 pm.

- Informational flyers were mailed to the entire stakeholder list as well as all landowners within the 2-mile Study Area on July 9, 2019.
- Notification was published in both the Watkins Glen Review & Express and the Schuyler County Hi-Lites approximately 4 weeks prior to the open houses.
- In total, 26 people attended the open houses.

Similarly, notification for the third and fourth open houses, similarly held in the afternoon and evening of March 12, 2020, was published in Watkins Glen Review & Express and the Schuyler County Hi-Lites. Again, informational flyers were mailed to the entire stakeholder list as well as all landowners within the 2-mile Study Area in February 2020, approximately 3 weeks prior to the open house. Approximately 13 people in total attended the open houses.

Following both sets of open houses, comments on potential visual impacts, potential wildlife and wetland impacts, array location, and compatibility with existing community character were received. The following actions regarding these comments were performed by the Applicant:

- Proposed vegetative screening to address concerns about views from residential receptors;
- Conducted extensive wildlife studies and minimized impacts to wetlands;
- Assessment of siting array locations within the Project Area;
- Proposed a Payment in Lieu of Taxes (PILOT) program to deliver economic benefits to the Town of Dix, the local schools, and Schuyler County; and
- Created a decommissioning plan including detailed information on the decommissioning process.

Paper copies of Project Application documents, and any Supplement required to be filed by the Chair, except those provided under a claim of confidentiality, will be sent to the designated local repositories.

### ***(5) Outreach Events and Meetings***

The Applicant has mailed informational flyers to over 100 property owners and has held four open houses accessible to residents of the Study Area in accordance with the PIP Plan. At the open houses, attendees were able to join the stakeholder list if they wished to receive notices of Project milestones and Project information updates. Additionally, the Project website and phone number have been and continue to be available to the community to provide Project information.

The Applicant, through PIP Plan consultations and meetings with state and town officials and landowners within the Project Study Area as well as written comments, has identified the following key Article 10 issues and proposed Project changes:

- Potential impacts to wildlife and wetlands;
- Impacts to agricultural land;
- Potential visual impacts to surrounding areas; and
- Siting of interconnection facilities and EMF impacts.

The Applicant has conducted numerous studies related to the above-listed concerns and has sited the Project such that minimal impacts will result from construction and operation of the Project.

Stakeholders identified in the PIP Plan include the local municipality, the Town of Dix, and its respective points of contact: Town of Dix Supervisor, Schuyler County Administrator, and the appropriate town or county clerks. The stakeholder list also includes municipal officials from adjacent communities within the 2-mile Study Area. In addition to municipal officials, the stakeholder list includes the followings people/entities: county, state, and federal agencies, legislative representatives, highway departments, the local school district, emergency responders, utilities, public interest groups, and miscellaneous stakeholders identified during public outreach efforts.

The participating landowner (real property owner that has entered into lease or purchase agreement with Watkins Glen Solar Energy Center, LLC), is included in the stakeholder list. Adjacent landowners (within 2,500 feet of the Project Area parcel boundary) have also been included in the stakeholder list as one group. Similarly, residents of the Study Area (non-participant landowners or adjacent landowners) have also been included in the stakeholder list as one group. An updated stakeholders list has been provided in Appendix 2-5.

Stakeholders were notified at least 3 days prior to this Application being filed. Notifications were published in the Watkins Glen Review & Express and the Schuyler County Hi-Lites newspapers detailing the proposed Project and a summary of the contents of the Application. Notification was also mailed to each member of the State legislature in whose district the Facility is to be located as proposed. The notices included information on where and how the public could retrieve supplementary information on the Project.

## **2(d) Brief Description of the Public Involvement Program after Submission of the Application**

The Applicant will continue to meet with state, county, and town officials after the Application is submitted. The meetings will include visits to town board meetings in the Project Area as requested to keep town officials and residents updated on the status of the Project. Public hearings will be held as part of the Article 10 certification process, which stakeholders and interested landowners may attend. The Applicant will also continue to meet with interested parties if requested. The Applicant will continue to engage stakeholders, sponsor open communication with non-public entities, and continue meeting with stakeholders during preparation for construction, construction itself, and operation. The Applicant has also prepared a Complaint Resolution Plan and resolution procedures, as detailed in Exhibit 12, for construction and operation of the Project.

The most up-to-date stakeholder list is provided in Appendix 2-5 of this Application. Identification of stakeholders has been an ongoing process as described in Section 2(c) above. In addition to notifications required under 16 NYCRR § 1000.7, the Applicant will mail notice of the Application submittal to the Project mailing list. The mailing list is composed of the updated stakeholders list, including host and adjacent landowners, and additional addresses received through public outreach. The notice will include general information on the Project and the Article 10 Application specifically.

## **2(e) Relevant and Material Fact Analysis**

In order to support the Article 10 Application Exhibit requirements and ensure the safety and security of public and private resources, the Applicant has conducted numerous studies and analyses, as well as in-depth literature reviews. The studies and analysis conducted regarding the construction and operation of the Project extended beyond the Project Area to accurately characterize the potential impacts to resources as identified in Section 168 of the Public Service Law (PSL). The information contained in this Application provides sufficient bases for the Siting Board to grant the Article 10 Certificate in accordance with Section 168 of the PSL.

### ***Section 168(2) of PSL***

The probable environmental impacts due to construction and operation of the Project are briefly discussed below including an overall analysis of the relevant and material facts for each required finding related to the probable impacts.

**Ecology:** The Project Area consists of active agriculture (46.7%), disturbed development (4.5%), forest land (39.6%), open water (0.1%), successional old field (4.7%), and successional shrubland (4.4%). No threatened, endangered, candidate, rare plant species, or significant ecological communities were identified in the Project Area. Therefore, Project construction and operation are not expected to result in adverse impacts to protected plants or significant adverse impacts to ecological communities.

Impacts to vegetative communities will occur as a result of construction but have been minimized consistently throughout the process of siting Project Components. Conservatively, up to 6.51 acres of vegetation will be temporarily impacted. Concurrently, only up to 30.58 acres will be permanently displaced due to the siting of Project Components. Although the siting of Project Components will result in the minimal loss of plant community acreages, no specific plant community will be significantly reduced in population as a result of the Project. The plant community most impacted will be agricultural crop land and forestland, with expected conversion to grassland vegetation for the life of the Project. Project construction and operation will not adversely impact rare or protected plants or significantly impact ecological communities.

Avoidance efforts have been undertaken through the application of attentive site planning. During the design phase of the Project, special consideration was given to avoid unnecessary impacts to grasslands, forestland, wetlands, and successional old fields and shrublands. Impacts to these landscape features (and vegetation communities) as a result of the Project will be marginal. The Project Components have been located to confine disturbances to the smallest area possible.

Linear Project Components, such as access roads and collector lines, have been co-located where feasible to avoid and minimize impacts to plant communities. The solar arrays have been placed in areas previously disturbed by agriculture to the maximum extent practicable.

Avoidance and minimization of impacts to vegetative communities will also occur by complying with guidance from the on-site Environmental Monitor; maintaining clean work sites; employing best management practices during construction, operation, and maintenance; and by demarcating areas highly susceptible to adverse disturbances. Demarcated areas will be deemed inaccessible to construction equipment and disturbance activities.

**Ground and Surface Water:** No significant adverse and/or permanent impacts to groundwater quality or quantity are anticipated to result from the Project. In addition, solar energy centers do not use water to generate electricity during operations unlike numerous other conventional energy

sources. The potential exists for minor, short-term impacts to the local water table during the construction phase of the Project. Potential impacts to groundwater, although not anticipated, may occur through the introduction of pollutants from inadvertent discharges of petroleum and other chemicals, and minor leaks or mechanical failure of construction equipment/vehicles. To minimize the potential for and impacts from the release of hazardous chemicals during construction and operation, the Project will adhere to a Project-specific Spill Prevention, Control and Countermeasure (SPC) Plan. An SPC Plan will be submitted to the Secretary prior to construction of the Project. Additional information regarding groundwater impacts and impact prevention is included in Exhibit 23 of this Application.

Wetland and waterbody delineations were conducted in the summer of 2017 and spring of 2019. The Project Components have been sited to avoid impacts to terrestrial ecology and wetlands to the maximum extent practicable. Wetlands delineated inside the Project Area were determined to be non-jurisdictional. Through careful siting of Project Components, approximately 0.04 acres of temporary impacts to isolated, non-jurisdictional wetlands are anticipated. No permanent impacts to wetlands are anticipated within the Project Area. Certain construction activities may result in temporary direct and/or indirect impacts to surface waters, including the installation of access roads and solar arrays, upgrading of existing access roads, installation of underground collection lines, and the development of temporary staging areas and workspaces around solar panel sites and substations. Potential temporary impacts will be minimized through the use of Best Management Practices (BMPs) as outlined in the Project's SWPPP.

Impacts related to the construction of access roads and collection line crossings will be minimized by utilizing an existing stream crossing located on the Project's westernmost parcel and locating new collection line crossings for the Project gen-tie from the solar arrays to the POI facilities at narrow wetland and waterbody locations where feasible. Additional minimization techniques to minimize impacts include relocating Project Components (i.e., re-siting) to avoid wetlands and waterbodies based on the results of the delineation efforts to the maximum extent practicable. In areas where Project Components are adjacent to or cross non-state regulated wetlands, streams, or drainage ditches/swales, appropriate erosion and sediment control measures will be installed and maintained in accordance with the Project-specific SWPPP or other BMPs specific to working in and near water, as discussed in multiple exhibits of this Application. A Preliminary SWPPP, provided as Appendix 23-3, has been prepared for the Project and will be finalized prior to construction. The Applicant also proposes to install portions of the Facility collection lines via HDD under sensitive water resources, where practicable, to further reduce impacts.



Conservative estimates indicate that a total of approximately 0.04 acres of isolated, non-jurisdictional wetlands will be temporarily impacted. No permanent impacts to wetlands are anticipated as a result of the Project. A total of 57 linear feet of waterbodies may be impacted in total as a result of the Project. Of these impacts, approximately 7 linear feet of waterbodies will be temporarily disturbed. This disturbance is the result of improvements to an existing stream crossing where an existing farm road crossing a waterbody will be improved with culverts to serve as an access road to the western portion of the Project Area. Therefore only 50 linear feet of waterbodies are anticipated to be permanently impacted. Impacts will be minimized to the extent possible by use of HDD and employment of BMPs as described in the Preliminary SWPPP, as provided in Appendix 23-3.

**Wildlife and Habitat:** Based on Project-specific information received from the New York Natural Heritage Program (NYNHP), New York State Department of Environmental Conservation (NYSDEC), United States Fish and Wildlife Service (USFWS), and direct on-Site observations, a list of state- and federally listed species was compiled for those species that are believed to occur or have the potential to occur within the Project Area. Site-specific information was requested from agencies to determine the presence of rare, threatened, endangered, and special concern species. Site surveys were conducted by qualified biologists.

No federally listed endangered or threatened species are known to occur in the vicinity of the Project Area. There is one state-listed endangered species and three state-listed threatened species documented within the Study Area, as well as three species of special concern within the State, which were identified through field observations during the Audubon Christmas Bird Count (CBC) (peregrine falcon, bald eagle, northern harrier, pied-billed grebe, Cooper's hawk, horned lark, and sharp-shinned hawk). Of these species, only the Cooper's hawk has been documented within the Project Area during field surveys conducted by the Applicant. As discussed in Exhibit 22, no impacts to these species are anticipated as a result of the Project. No take of a threatened or endangered species, or its occupied habitat, is anticipated from construction or operation of the Project.

Impacts to wildlife and their various habitats have been avoided and minimized to the extent practicable; however, some impacts will occur as a result of this Project. Impacts are restricted to incidental injury and mortality due to various construction operations, temporary displacement due to increased human activity during construction, and habitat disturbance and/or loss

(including the loss of travel corridors) as a result of clearing, earth-moving, and the siting of Project Components.

Site design practices avoid sensitive habitats by siting solar arrays primarily in agricultural fields, minimizing construction disturbances to the extent practicable, adhering to designated construction limits, and avoiding off-limit sensitive areas. Through initial impact analysis and careful site design, permanent habitat loss and forest fragmentation have been avoided or minimized. A majority of access roads, collection lines, and solar arrays will be sited in agricultural fields to minimize impacts to natural communities, including forest fragmentation.

The Project will not cause naturally occurring populations of common or rare birds to be reduced to numbers below levels for maintaining viability at local or regional levels.

**Public Health and Safety:** Solar energy generation facilities and technologies do not pose adverse environmental or public health impacts. The solar arrays produce clean, renewable energy and reduce the need for fossil fuel combustion energy generation, which produce a high amount of air emissions. Solar energy generation does not require fuel combustion and does not generate air emissions. Minimal pollutants will be emitted during construction activities, resulting from diesel-fired generators, vehicles, construction equipment, and dust. Construction-related emissions will be reduced through the use of BMPs.

Siting setbacks from residences, roadways, and other existing facilities will be implemented to minimize the potential glare from the Facility. A Glint and Glare Analysis, provided as Appendix 24-2, was conducted to identify potential impacts to nearby residences and roads. The analysis indicated no impacts from glare are expected as a result of the Project.

**Cultural, Historic, and Recreational Resources (Including Aesthetics and Scenic Values):** Phase IA background research has been completed and a Phase IB field survey was completed to determine the potential impacts to archaeological resources resulting from the construction and operation of the Project.

The Phase IA study revealed that the Project Area is not located within an archaeologically sensitive area. OPRHP records confirmed that there are no National Register of Historic Places (NRHP)-listed or eligible archaeological sites within the Area of Potential Effect (APE). The study indicated that no archaeological investigations have been conducted and no archaeological sites have been identified within a 1-mile radius of the Project. An archaeological sensitivity analysis of

the Project Area determines that approximately 149 acres of the approximately 771-acre Project Area (approximately 19%) are considered to have high sensitivity for archaeological resources, approximately 368 acres (approximately 48%) are considered to have high sensitivity for archaeological resources, and approximately 257 acres (approximately 33%) are considered to have high sensitivity for archaeological resources. A Phase IB survey of the Project Area was conducted to determine whether archeological sites are located in areas of proposed ground disturbance for the Project. The Phase IB survey consisted of both systematic surface survey and shovel test pit (STP) surveys to locate all archaeological resources within the Project APE. In areas of high or moderate archaeological sensitivity, STPs were excavated at 15-meter intervals. In total, 2,184 STPs were excavated, resulting in the recovery of 312 total artifacts from one historic site (TRC-WG-1), two non-site historic field scatters (TRC-IF-2 and TRC-IF-3), and one prehistoric isolated find spot (TRC-IF-1). Site TRC-WG-1 contains the remnants of a historic structure and is recommended by TRC for avoidance or further study. The two non-site historic field scatters (TRC-IF-2 and TRC-IF-3) are not recommended by TRC for avoidance or further study. The isolated find spot (TRC-IF-1) is, by definition, considered ineligible for the National Register and is not recommended by TRC for further study. The Phase IB has been submitted to OPRHP for their review of the findings and TRC's recommendations. Refer to Exhibit 20 for additional information regarding the Phase IA study and Phase IB survey.

As a result of a historic architectural survey conducted for the Project, TRC identified one NRHP eligible property, two properties listed or recommended eligible for listing in the NRHP, three newly surveyed cemeteries recommended potentially eligible for NRHP listing, one newly surveyed resource recommended undetermined, and 51 resources recommended not eligible for NRHP listing within the Project APE. TRC did not identify potential historic districts during the survey. Based on the location of the historic properties, Project visibility is reduced and minimized by intervening objects and structures, as well as distance and vegetation. TRC's analysis of the undertaking in relation to historic properties; therefore, concludes that construction activities will not directly or indirectly affect the character-defining features that contribute to the significance of any NRHP-listed, eligible, or recommended eligible resources in the APE. Refer to Exhibit 20 for additional information.

Visual impacts of the Project are minimal to recreational, scenic, and aesthetic values. A VIA was conducted for the Project, is described in Exhibit 24 and is available as Appendix 24-1 of this Application.

**Transportation:** Construction traffic will involve the use of aggregate trucks, a construction crane, concrete trucks, and semi-trailers as described in Table 25-3 of Exhibit 25. A total of 1,037 trips, distributed over several months, are anticipated to support the delivery of equipment and materials, and construction of the Project. The construction workforce is anticipated to contribute an additional 169 daily trips to the existing traffic volumes. The Facilities' haul routes have been designed to minimize impacts to the maximum extent practicable. Based on the existing traffic data obtained from the NYSDOT, additional construction traffic associated with this Project is not expected to have any major impacts to existing roads. No necessary roadway improvements were identified; any roadway repairs needed due to damage caused by construction associated with the Project will comply with Road Use Agreements (RUAs) to be established with the Town of Dix.

**Communication:** The Applicant conducted a review of potential impacts to communication technology as a result of the Project. It was determined that the Project will have no adverse impacts to major communication technologies, including aboveground and underground utility and fiber optic lines. This determination includes consideration to: broadcast patterns, lines-of-sight, physical disturbance, co-located lines due to unintended bonding, and other interference potentials.

**Utilities and Other Infrastructure:** The Applicant will consult with local utilities to ensure negative impacts to electric, water, or communications utilities services and infrastructure do not occur. The Applicant has also consulted with the Columbia Pipeline and the Empire Pipeline to obtain their guidance and coordination concerning construction of the Project to avoid any interference with their facilities that traverse the Project Area (see Exhibit 12 for details).

### **Section 168(3) of the PSL**

**The Project is a beneficial addition to the electric generation capacity of NYS:** New York Energy Law § 6-104 requires the State Energy Planning Board to adopt a State Energy Plan, the latest full iteration of which was issued in 2015. The 2015 State Energy Plan included a series of policy objectives including a 40% reduction in greenhouse gas emissions from 1990 levels, and 50% of electricity generation in the state to be obtained by renewable energy sources by 2030. The New York Public Service Commission adopted the Clean Energy Standard (CES) in 2016 to implement the policy objectives of the 2015 State Energy Plan, including the solicitation of Renewable Energy Credits (RECs) from large/commercial-scale solar projects via requests for proposals administered by NYSERDA. The Watkins Glen Solar Energy Center Project was

awarded a contract by NYSEDA to generate RECs to be purchased by NYSEDA for use in reducing greenhouse gas emissions in the State. The Climate Leadership and Community Protection Act (CL&CPA), which was signed into law in 2019, expands on the 2015 State Energy Plan's goals and the CES by requiring that 70% of electricity be generated from renewable energy sources by 2030 and that New York's electricity generation be carbon-free by 2040. The CL&CPA also requires programs be established to ensure that 6 gigawatts of solar generation be developed by 2025. The State Energy Plan was amended in April 2020 to include the CL&CPA's renewables mandates. The Project will directly contribute significantly to these goals by providing emissions-free, low-cost, renewable energy to New York's energy market. The Project will also create job opportunities, support economic growth, and help the State reduce greenhouse gas emissions. The Project will produce enough zero-emissions energy to power more than 12,000 homes in NYS.

***The construction and operation of the facility will serve public interest:*** The Project will serve the public interest of those living within the Project Area and beyond throughout construction and operation. The Applicant is committed to hiring locally whenever possible and has already employed over 25 people from the State to assist with the development of the Project. Additionally, as described in Exhibit 27, the Project is anticipated to employ between 125 and 175 local jobs during construction including equipment operators, truck drivers, laborers, and electricians, in addition to creating approximately two to three permanent operation and maintenance jobs throughout the 30-year expected life of the Project as well as the hiring of local contractors for site maintenance including landscaping and snow removal services. In addition, the Project will contribute significant revenue to NYS through in-state payroll to those employed through the Project as well as construction expenditures in the State.

In addition to jobs in the State, the Applicant intends to contribute significant revenue to the community. The Applicant and the Schuyler County Industrial Development Agency (SCIDA) are discussing a PILOT agreement that will contribute significant revenue to the County, Town, and school district for up to 20 years. The Project is anticipated to generate millions of dollars in payments to landowners that are participating in the Project, money that will benefit the local community and economy. The public interest will also be served by reducing greenhouse gas emissions, as discussed above.

***Adverse environmental effects of the construction and operation of the Project will be minimized or avoided to the maximum extent practicable:*** As demonstrated and discussed within this Application, the Applicant has conducted numerous studies and analyses to assess and avoid or minimize environmental effects due to construction and operation of the Project, to the maximum extent practicable. The studies and analyses include, but are not limited to:

- Wetland surveys have been conducted and Project Components have been moved to avoid the vast majority of wetlands in the Project Area. Delineated wetlands within the Project Area are non-jurisdictional as they are not associated with currently mapped NYSDEC freshwater wetlands or their 100-foot adjacent areas;
- Wildlife and habitat research has been conducted and Project Components have been sited and adjusted to mitigate impacts;
- Sound studies have been conducted and noise-producing equipment has been moved to avoid or minimize impacts to local residents;
- Extensive cultural analysis, including shovel tests, has been conducted to avoid impacting historic resources at the Project Area;
- The Applicant will use BMPs and implement mitigation measures, such as dust control, during construction to minimize impacts; post-construction decommissioning and restoration will return the Project to as close to pre-construction conditions as possible.

The Applicant has spent years and millions of dollars on the supporting materials contained herein. The Project and Application have been structured to avoid and minimize impacts and ultimately build a solar project that will be a benefit to the community and the State of New York.

***The Applicant will avoid, offset, or minimize the impacts caused by the Project upon the local community:*** Significant and adverse environmental impacts to the local community will not occur as a result of the Project. As detailed in the Application, the Project will avoid, offset, or minimize the impacts resulting from the Project to the maximum extent practicable. The Applicant intends to execute a PILOT agreement, which will significantly benefit the community for the next 20 years and will outweigh the relatively minor impacts associated with the Project.

***Except where noted otherwise, the Project is designed to operate in compliance with applicable state and substantive local laws and regulations:*** As discussed in Exhibits 31 and 32, the Project was designed and will operate in compliance with applicable state and substantive local laws and regulations concerning, among other matters, the environment and public health

and safety with the exception of two substantive requirements of the Town of Dix Zoning Ordinance (2016) and two substantive requirements of the Town of Dix Solar Law (2018, amended in 2019 and 2020) regarding utility distribution facilities required to be located underground (Town of Dix Zoning Ordinance, Section XIV-5.11); performance guarantee for landscaping (Town of Dix Zoning Ordinance, Article IX (3.C.)); decommissioning - inactive duration of 6 months (Town of Dix Solar Energy Law, Section 8.H.1); and decommissioning - bond and escalator (Town of Dix Solar Energy Law, Section 8.H.3). As documented in Exhibit 31: Local Laws and Ordinances, the Applicant is requesting that the Siting Board elect not to apply these requirements as they are unreasonably burdensome in the view of existing technology, cost/economics, or consumer needs and would prevent the Project from being built.